

KRAL, EMANUEL

Nemoci pohybového ústrojí domácích zvířat. (3 doplnené vyd.) Praha, Státní pedagogické nakl., 1957. 425 P. ( Učební texty vysokých škol) (Diseases of the motor system of domestic animals; a university textbook. 3d enl. ed.) DA Not in DLC

SO: Monthly Index of East European Accessions (EEAI) Vol. 6, No. 11 November 1957

*KRAL E*  
KRAL, E.

Building machinery exhibited at the Exhibition of Engineering at Brno, in 1956.

P. 6 (Mechanisation) Vol. 4, No. 1, Jan. 1957, Czechoslovakia

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC. - VOL. 7, NO. 1, JAN, 1958

ERAL, E.

Will the building trade get the machines it needs.

P. 77, (Mechanicae) Vol. 4, no. 3, Mar. 1957, Czechoslovakia

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC. - VOL. 7, NO. 1, JAN. 1958

KRAL, Emil, doc., inz.

Commemorating the 60th birthday of professor Vladimir  
Smitka. Inz stavby 10 no.4:150,155. Ap '62.

KRAL, Emil, doc., inz.

Large containers for loose material reloading in railway yards.  
Poz stavby ll no.3:159-162 '63.

1. Ceake vysoke uceni technicke, Praha.

.. KRAL, Eugen, inz.

"Vegetation of the earth in ecological view" by H.Walter.  
Reviewed by Eugen Kral. Les cas 10 no. 4:430-432 Ap '64.

1. Institute of Forest Economic Development, Worksite Zdar  
nad Sazavou.

KRAL, Eugen, inz.

Forest and forestry in Hungary. Les cas 11 no.4:399-404 Ap '65.

1. Institute of Forest Economic Development, Worksite Zdar nad  
Sazavou.

KRAL, F.; SEFRANEK, B.; DANEK, F.

"New Principles in the Autumn Nutrition of Plants", P. 683, (ZA SOCIALISTICKE ZEMEDELSTVI, Vol. 4, No. 7/8, July/Aug. 1954, Praha, Czechoslovakia)

SO: Monthly List of European Accessions, (EEAL), LC, Vol. 3, No. 12, Dec. 1954, Uncl.



KRAL, F.; BRDA, J.

"System of Crop Rotation and Mechanized Manuring", P. 719, (ZA  
SOCIALISTICKE ZEMEDELSTVI, Vol. 4, No. 7/8, July/Aug. 1954, Praha,  
Czechoslovakia)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3, No. 12,  
Dec. 1954, Uncl.

KRAL, F.; KAIGL, O.

New rubber packing rings for Czechoslovak railways. p. 150.

ZELIŽNICE A DOPRAVA A TECHNIKA. (Ministerstvo dopravy)  
Praha, Czechoslovakia  
Vol. 7, no. 8, 1959

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 11.  
Nov. 1959  
Uncl.

KRAL, FRANTISEK

116 4  
Study of deformation characteristics of plastics by the cone penetration method. Oskar Kral and Frantisek Kral. Chem. Abstracts 74: 111087. A method of evaluation of properties of plasticized poly(vinyl chloride) and of polyethylene by cone penetration has been worked out. A relationship has been found between the depth of initial penetration and the subsequent flow of the material. The exper. results indicate that a simultaneous increase or decrease in both the initial penetration depth and the flow is characteristic of properties due to phys. changes, whereas, e.g., a drop in the depth of penetration with concurrent increase of flow is characteristic of chem. changes. The time of penetration of cone can be varied to meet the specific properties of materials. L. A. Holmberg

KRAL, F.

Prerequisites for successful development of electrification in agriculture.  
p. 74. ELEKTROTECHNIK. (Ministerstvo strojirentsvi) Praha. Vol. 11, no. 3,  
Mar. 1956.

SOURCE: East European Accessions List, Vol. 5, no. 9, September 1956

Kral, F.

What to do with older electric equipment. p. 169 ELEKTRIC-  
TECHNIK. (Ministerstvo strojirenstvi) Praha. Vol. 11, no. 5,  
May 1956.

Source: FEAL LC Vol. 5, No. 10 Oct. 1956

KRAL, F.

KRAL, F. Dangerous lightning rods. p. 18.

Vol. 12, no. 1. Jan. 1957

ELEKTROTECHNIK

TECHNOLOGY

Czechoslovakia

So: East European Accession, Vol. 6, No. 5, May 1957

KRAL, F.

TECHNOLOGY

Periodicals: ELEKTROTECHNIK Vol. 14, no. 3, Mar, 1959

KRAL, F., Danger resulting from static electricity. p. 100.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 5,  
May 1959, Unclass.

KRAL, F.

Explosions in electric installations and their consequences. p. 331.

ELEKTROTECHNIK. (Ministerstvo tezkého strojírenství) Praha, Czechoslovakia.  
Vol. 14, no. 10, Oct. 1959.

Monthly list of East European Accessions (EEAI) LC, vol. 9, no. 1, Jan. 1960.

Uncl.



S/263/62/000/006/006/015  
I008/I208

AUTHOR: Král, Frantisek

TITLE: An electromagnetic dispenser with a solenoidal valve

PERIODICAL: Referativnyy zhurnal, otdel'nyy vypusk. 32. Izmeri-  
tel'naya tekhnika, no.6, 1962, 34, abstract 32.6.207.  
(Prumysl potravín, 1961, 12, no.6, 329 [Czech.])

TEXT: The Stara Tura (Czechoslovak Democratic Republic) fine mechanics works put on the market an electromegnetic liquid dispenser of the type V na 6. By pressing a pushbutton once, the dispenser is started to dispense a preset amount of liquid; by pressing twice, the flow of the liquid is arrested. The control box is supplied with light indicators: red - "off"; green - "on". The device may be operated by remote control. The device contains a flowmeter, a solenoidal valve, a filter, a control box and a power supply. The dose is set by turning an iron ring. The working temperature reaches 40° at 6 atm pressure. The doses are

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S/263/62/000/006/006/015  
I008/I208

An electromagnetic dispenser...

10-100 l. The maximum dispensing capacity at 4 atm pressure is  
600 l/hr. There are 2 figures.

[Abstracter's note: Complete translation.]

Card 2/2

KRAL, Frantisek; TRESNAK, Zdenek, ins.

Polyvinyl chloride coating of the roof covering of freight  
cars. Zel dop tech 11 no.9:260-263 '63

KRAL, Frantisek

New Sectional Standards: Lubricator type 53 and Master type 52.  
Zel dop tech 12 no.10: 282 '64.

KRAL, Frantisek, inz.

Conference on the new technology in Novy Bor. Sklar a keramik 14,  
no.12:348 D '64.

1. Severoceske sklarny, Svor u Cvikova.

KRAL, Iosef [Kral, Josef]

Double layer potential in  $n$ -dimensional space. Dokl. AN SSSR  
159 no.6:1218-1220 D '64 (MIRA 18:1)

1. Karlov universitet i Matematicheskiy institut Akademii nauk  
Chekhoslovatskoy Sotsialisticheskoy Respubliki, Praga. Pred-  
stavleno akademikom V.I. Smirnovym.

S/081/62/000/019/028/053  
B101/B180

AUTHOR: Kral Ivan, Bělošil Leněk

TITLE: Determination of the composition of vinyl chloride and vinyl acetate copoly.

ABSTRACT: Referativnyi zhurnal. Khimiya, no. 19, 1962, 506, abstract 1919 (Kaucuk i pl. v. smoty, no. 6, 1961, 258-261 [Czech.])

TEXT: A rapid and easy method has been developed for determining vinyl chloride and vinyl acetate (I) in copolymers of vinyl chloride and I. The sample was dissolved in a mixture of methanol and water (1:1), then the copolymer was separated, dried, homogenized, and analyzed. Chlorine was determined by the modified Schlenker method (a weighed portion ~0.1 g is burned, with argentometric titration of the chlorides). The I content in the copolymer was determined by IR spectroscopy and the intensity of the  $1750\text{ cm}^{-1}$  absorption band, which is characteristic of carbonyl groups, was measured. [abstracter's note: Complete translation.]

Card 1/1

ACCESSION NR: AP4022947

S/0020/64/155/001/0032/0034

AUTHORS: Kral, Iosef

TITLE: On angular limiting values of Cauchy type integrals

SOURCE: AN SSSR. Doklady\*, v. 155, no. 1, 1964, 32-34

TOPIC TAGS: real variable functions, measure theory, integration theory, Cauchy integral, angular limiting value

ABSTRACT: Let  $C$  be a simple oriented rectifiable arc in the complex plane  $E_2$ . For any finite function  $\varphi$ , integrable with respect to the linear measure on  $C$ , and for any point of  $\eta \in C$ , let

$$\Phi_*(z) = \int_C \frac{\varphi(\eta) - \varphi(z)}{\eta - z} d\eta, \quad z \in E_1 \setminus C.$$

For functions  $\varphi$  which take only real values on  $C$ , let

$$\Phi_1^*(z) = \operatorname{Re} \Phi_*(z), \quad \Phi_2^*(z) = \operatorname{Im} \Phi_*(z).$$

Necessary and sufficient conditions are given for the existence of a limiting value for each of the integrals  $\Phi_1^*(z)$ ,  $\Phi_2^*(z)$ , as  $z$  approaches

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ACCESSION NR: AP4022947

$\gamma$  along a path not tangent to  $C$ , under the assumption that there is a function  $p$  defined on  $C$ , bounded, non-negative, lower semi-continuous, and such that

$$\varphi(\zeta) - \varphi(\eta) = O(p(\zeta)), \quad \zeta \rightarrow \eta; \quad (1)$$

$$\text{or } \varphi(\zeta) - \varphi(\eta) = o(p(\zeta)), \quad \zeta \rightarrow \eta; \quad (2)$$

The conditions are expressed in terms of the quantities  $v_k^*(\eta; p)$ ,  $v_k^*(\eta; p)$  ( $k=1,2$ ), previously introduced by the author for the special case  $p \equiv 1$ , and defined as follows. For  $a \leq b$  and  $R > 0$ , let

$$S_R(\eta; a, b) = (\eta + re^{i\theta}; \quad 0 < r < R, \quad a < \theta < b). \quad (3)$$

$$\text{For real } x \text{ and } T_R(x; \eta; p) = \sum_{\zeta \in C \cap S_R(\eta; x, x)} p(\zeta), \quad (4)$$

$$\text{and } \tau_R(x; \eta, p) = \sum_{\zeta \in C \cap S_R(\eta; x, x)} |\zeta - \eta| p(\zeta). \quad (5)$$

$$\text{Also, for } x > 0, \text{ let } v(x; \eta, p) = \sum_{\zeta \in C, \quad |\zeta - \eta| = x} p(\zeta). \quad (6)$$

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(The functions  $\Gamma_R(x; \dots)$ ,  $\gamma_R(x; \dots)$ ,  $v(x; \dots)$  are Lebesgue-measurable.) Finally, let

$$u_R^1(\eta; \rho) = \int_0^{\pi} \Gamma_R(x; \eta, \rho) dx, \quad u_R^2(\eta; \rho) = \int_0^{\pi} v(x; \eta, \rho) dx, \quad (7)$$

$$V_R^1(\eta; \rho) = \int_0^{\pi} x^{-1} v(x; \eta, \rho) dx, \quad V_R^2(\eta; \rho) = \int_0^{\pi} \Gamma_R(x; \eta, \rho) dx. \quad (8)$$

Main result: Let  $\eta \in C$ ,  $R > 0$ ,  $a < b$ , and suppose  $C$  does not intersect  $S_R(\eta; a, b)$ . (A) Suppose  $C$  does not intersect  $S_R(\eta; a+\pi, b+\pi)$  as well, and let  $a < x < b$ . If  $\lim_{r \rightarrow \infty} |\Phi_\eta(\eta + re^{ix})| < \infty$  for each function satisfying

$$|\varphi(\zeta) - \varphi(\eta)| < K\rho(\zeta), \quad \zeta \in C, \quad (9)$$

for some positive  $K$ , then

$$V_\infty^k(\eta; \rho) < \infty, \quad (10)$$

for  $k = 1, 2$ .

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ACCESSION NR: AP4022947

(B) If  $V_p^k(\eta; p) < \infty$ ,

(K = 1, 2)

(11)

for some  $\xi > 0$ , then for all  $\varphi$  satisfying (1), we have

$$\int_{\xi}^{\eta} \frac{\varphi(t) - \varphi(\eta)}{t - \eta} dt = \lim_{z \rightarrow \eta} \Phi_z(z), \quad z \in S_R(\eta; a_1, b_1), \quad (12)$$

where  $a < a_1 \leq b_1 < b$ . All  $\Phi_r$  corresponding to functions  $\varphi$  satisfying (9) for a given K, are equicontinuous on  $S_r(\eta; a_1, b_1)$  for  $0 < r < R$ .  
Orig. art. has: 00

ASSOCIATION: Karlov universitet Praga, ChSSR (Karlov University)

SUBMITTED: 04Nov63

DATE ACQ: 08Apr64

ENCL: 00

SUB CODE: MM

NR REF SOV: 004

OTHER: 002

Card 4/4

F KRAL, J.

G

1089. LAYING OF STREET GAS MAINS FOR MEDIUM AND LOW PRESSURES.  
Kral, J. (Paliva (Fuel), Apr. 1951, vol. 31, 84-86). The advantages and disadvantages of cast iron and steel pipes are discussed. A detailed description is given of welding, control, and insulation of pipe lines in the soil. (L). B.A.

L 62161-62 FWT(d)/ENP(w) EM

ACCESSION NR: AP5019908

(Z/0032/64/014/012/0915/0917

AUTHOR: Kral, J.

TITLE: Protecting the working parts of hydraulic turbines against cavitation <sup>14</sup> B

SOURCE: Strojitestvi, v. 14, no. 12, 1964, 915-917

TOPIC TAGS: metal plating, surface hardening, hydraulic equipment, water turbine

Abstract (Author's English summary, modified): The article deals with two methods, plating and hard surfacing, applied to protect working parts of hydraulic turbines against cavitation. The protection provided by plating is not very reliable. On exposed parts of the turbines, platings are torn off and distorted. Hard surfacing is better in every respect. The article compares the two methods not only from the technical, but also from the economic point of view. Orig. art. has 5 figures, 1 graph, and 2 tables.

ASSOCIATION: CKD, Blansko

SUBMITTED: 00

NO REF SOV: 000

Card 1/1

ENCL: 00

OTHER: 000

SUB CODE: EE, MM

JPRS

REI, J.

Serial photography . n. 2.

(HISTORY, Vol. 36, No. 1, 1966 (Published 1965))

SO: Monthly List of East European Accessions (REI) IC Vol. 6, No. 15, Dec. 1966  
Encl.

KRAL, J.; PETER, R.; SISTEK, J.; VESELY, K.

Gynecological surgery in childhood. Cesk. gynek. 29 no.5:  
384-387 Je'64

1. Katedra p r. a gyn. dospelych a deti pri fak. det. lek.  
KU [Karlovy university] v Praze; vedouci: prof. dr. R. Peter.  
DrSc.

CZECHOSLOVAKIA/Chemical Technology. Chemical Products and Their H-13  
Application. Ceramics. Glass. Binding Materials. Concrete

Abs Jour : Ref Zhur - Khim., No 24, 1958, No 82434

Author : Krenek Z., Kral J.

Inst : -

Title : Possibility of the Utilization of Phenolite (sic) in the  
Manufacture of Alkaline Earth Glazings for Stone Products

Orig Pub : Stavivo, 1958, 36, No 5, 180-181

Abstract : Qualities of feldspar, pegmatite, and phenolite (sic) were  
investigated and compared for the purpose of establishing a  
possibility of substituting the latter for the two former  
ones in the alkaline earth glazings. Three compositions of  
glazing are recommended for practical applications.

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KREMER, Z., H. A. 1944, 1945.

1. The first part of the paper is devoted to the study of the  
2. properties of the function  $f(x)$  which is defined by the  
3. equation  $f(x) = f(x-1) + f(x-2)$  for  $x \geq 1$  and  $f(0) = 1$ ,  $f(1) = 1$ .

4. The second part of the paper is devoted to the study of the  
5. function  $f(x)$  which is defined by the equation  $f(x) = f(x-1) + f(x-2)$  for  $x \geq 1$  and  $f(0) = 1$ ,  $f(1) = 1$ .

ZIKA, Miloslav; ZELENKOVA, Jirina; KRAL, Jan

Effect of potentiated medication on the course of labor. Cas. lek. cesk.  
101 no.44:1310-1315 2 N '62.

1. Gynekologickeporodnicke oddeleni OUNZ v Pribrami, prednosta MUDr.  
Karel Marsal.

(NATURAL CHILDBIRTH) (BARBITURATES) (ANTIHISTMINICS)  
(ERGOT ALKALOIDS, HYDRGENATED) (LABOR)

CZECHOSLOVAKIA/Diseases of Farm Animals - Diseases of Unknown  
Etiology.

R-3

Abs Jour : Ref Zhur - Biol., No 4, 1958, 16943

Author : Kral, J.

Inst : -

Title : Infectious Bronchopneumonia of Cattle.

Orig Pub : Veterinarstvi, 1956, 6, No 11, 334-336.

Abstract : During the last 2 years, 5 enzootic diseases with a typical course and pathologo-anatomical changes were observed. In 90% of the cases, the disease had a favorable character, and in the course of 8-15 days a spontaneous recovery occurred. Only in the single animals a periodic cough was observed and the bronchopneumonia changed into a chronic one. Apparently, such animals became long-standing carriers of the infection. In severe cases, a catarrhal lobular bronchopneumonia and interstitial emphysema were observed. Different opinions as to the etiology of the

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CZECHOSLOVAKIA/Diseases of Farm Animals - Diseases of Unknown  
Etiology.

R-3

Abs Jour : Ref Zhur - Biol., No 4, 1958, 16943

disease (viral, rickettsial, and pasteurellar theories) are quoted. In the majority of cases, during the acute stage of the disease, in the lung tissue, on the mucosa of the bronchi and in the mucus of the Pasteurellae, Bact. coli, Proteus, and less often streptococci, were found. Rickettsia-like elements were not detected in the smears. For the treatment of bronchopneumonia, antibiotics, and in their absence sulfonamides, are recommended. The author considers bronchopneumonia as a certifiable disease, which should be classified as a viral infection, Pasteurellae being secondary agents. -- V.A. Kanzyuba.

Card 2/2

CZECHOSLOVAKIA/Microbiology - Microbes Pathogenic for Man and F  
Animals. Bacteria. Bacteria of the Intestinal Group.

Abs Jour : Ref Zhur Biol., No 22, 1958, 99387

Author : Kral, J., Trunkat, J.

Inst : -

Title : Bacteriophage in the Prophylaxis and Therapy of  
Salmonellosis.

Orig Pub : Veterin. med., 1958, 3, No 1, 43-58

Abstract : No abstract.

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Country : CZECHOSLOVAKIA  
Category : Diseases of Farm Animals. Diseases Caused by Bacteria and Fungi R  
Abs. Jour. : Ref Zhur-Biol, No 23, 1958, No 105810  
Author : Kral, J.  
Institut. :  
Title : Diagnosis, Eradication and Prophylaxis of Vibriosis in Cattle  
Orig Pub. : Veterinarstvi, 1958, 8, No 3, 104-106  
Abstract : A report is made on the ascertaining of the existence of vibriosis in Czechoslovakia. The clinical picture, diagnosis, therapy and prophylaxis of this disease are described mainly according to literary data.

Card: 1/1

CZECHOSLOVAKIA

SOCHID, L., of the Consultation Center for Physical Culture  
(Telovychovny lekarska poradna), Prague 2, Prof Dr J. KRAL,  
director.

"Sports Medicine and Boxing"

Prague, Casepis Lekaru Ceskych, Vol CII, No 16, 19 April 63,  
pp 427-429.

Abstract [Author's English summary]: From discussions among  
physicians the following conclusions may be drawn on boxing:  
Much has been done for the health of boxers, but not enough.  
The accident rate in boxing is lower than in some other  
sports. All armies in the world include boxing into their  
physical-training program. When all rules and regulations  
are respected there are no objections against boxing. Thirty-  
one references, including 1 Czech, 3 Russian, and 1 Polish.

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BENESOVA, D.; KRAL, J.; PETER, R.; SISTEK, J.; VESELY, K.

Cooperation between the clinician and pathologist in analyzing causes of fetal death. Cesk.gynek. 28 no.8:542-544 0 '63.

1. Ustav patol. anat. fakulty detskeho lekarstvi KU v Praze (prednosta doc. dr. D. Benesova) a III. gyn.-por. klin. fak. detskeho lekarstvi UK v Praze (prednosta prof. dr. R. Peter, DrSc).

\*



KRAL, J.

Protection of hydraulic turbine parts from cavitation. Strojirenstvi  
14 no.12:915-917 D '64.

1. Ceskomoravska-Kolben-Danek National Enterprise, Blansko.

KRENOVA-PECLOVA, Drahomira; KRAL, J.; BABOROVSKA, Jana; KREN, V.

Split tolerance in rats. Folia biol. (Praha) 9 no.4:258-264  
'63.

1. Department of Biology, Faculty of General Medicine, Charles  
University, Prague.

(SKIN TRANSPLANTATION) (ANTIBODY FORMATION)  
(ERYTHROCYTES) (ANTIGEN-ANTIBODY REACTIONS)

KRAL, Josef; MARIK, Jan

Integration on a smooth surface according to the Hausdorff measure.  
Cas pro pest mat 89 no.4:433-448 0 '64.

1. Faculty of Mathematics and Physics of Charles University, Prague  
8, Sokolovska 83. Submitted November 9, 1963.

PETER, R.; KRAL, J.; SISTEK, J.; VESELY, K.

Prevention of thromboembolism in gynecology and obstetrics.  
Cesk. gyn. 28 no.4:230-234 My '63.

1. III gyn.-por. klin. pediatr. fak. KU v Praze, prednosta  
prof. dr. R. Peter, DrSc.

(THROMBOEMBOLISM) (GYNECOLOGY)  
(PUERPERAL DISORDERS)  
(ELECTROCARDIOGRAPHY)  
(PULMONARY EMBOLISM)  
(POSTOPERATIVE CARE)

SEREKA, A.; JAKUBEC, I.; KRAL, J.; VRBA, C.

Anesthesia with carbamic acid series preparation. Cas.cesk.lek.  
Ved.priloha 63 no.9-12:293-297 Dec 1950. (CIML 20:9)

1. Of the Institute of Pharmaceutical Chemistry of Masaryk  
University in Brno and of Institute of Pharmacology of the  
Veterinary School in Brno.

MELICHAR, M.; CHALABALA, M.; KRAL, J.; MALY, J.; PRECECHTEL, M.; RUSEK, V.; SMECKA, V.; SOLICH, J.; SANDA, M.; ZACEK, H.

Working schedule for pharmacy students in 1952. Cesk. farm. 1 no.10:  
605-612 1952. (CLML 23:4)

1. Of the Department of Galenic Pharmacy of Masaryk University, Brno.

KRAL, J.

SEKERA, A.; HRUBY, J.; JARUBEC, I.; KRAL, J.; VRBA, C.; LEBDUSKA, J.

Local anesthetics. Basic esters of substituted carbamic acids [with summary in English]. Sbor. Chekh. khim. rab. 18 no. 6: 870-879 D '53.  
(MLRA 7:6)

1. Department of Pharmaceutical Chemistry of the University, and  
Pharmacological Department of the Veterinary School, Brno.  
(Anesthetics) (Carbamic acid) (Esters)

KRAL, J.

ND ✓ Stability of adrenaline in some collyria. J. Kral and V. Kotoušek (Masarykova Univ., Brno, Czech.). *Pharmazie* 24, 309-13 (1969).—Stability of adrenaline (I) in solns. of  $ZnSO_4$ ,  $HgO \cdot Mg(CN)$ , Intargol,  $H_2BO_3$ , Ag proteinate, and  $Na_2B_4O_7$  was studied. I was detd. chemically by color reaction with  $p-NO_2C_6H_4NH_2$  and  $NaNO_2$  in alk. soln. according to Sinodinos and Vuillaume (C.A. 43, 2045) and biologically (vasoconstriction of conjunctival vessels). Both methods showed the same results. The smallest decompn. of I took place in a soln. of  $H_2BO_3$ . In solns. of  $ZnSO_4$ , Ag proteinate, or  $HgOHg(CN)$ , the decompn. was more pronounced. The greatest decrease of I occurred in Intargol and  $Na_2B_4O_7$  (up to 50% in 15 days). K. Macek

(1)



CZECHOSLOVAKIA/Chemical Technology. Chemical Products and Their Applications. Medicinal Substances. Vitamins. Antibiotics. H

Abs Jour : Ref Zhur-Khimiya, No 6, 1959, 20542

Author : Kral, Jaroslav; Procechtel. Milan; Sanda, Miroslav

Inst : -

Title : The Production Inspection of Injection Solutions.

Orig Pub : Farmacia (Ceskosl.), 1957, 26, No 3, 71-76

Abstract : No abstract.

Card : 1/1

CZECHOSLOVAKIA/Chemical Technology: Chemical  
Products and Their Applications.  
Medicinal Substances. Vitamins.  
Antibiotics.

H

Abs Jour : Ref Zhur-Khimiya, No 6, 1959, 20516

Author : Kral, Jaroslav; Kozousek, Vladimir

Inst :                     

Title : On the Stability of Adrenalin in Some  
Eye Drops.

Orig Pub : Farmacia (Ceskosl.), 1957, 26, No 9, 264-268

Abstract : No abstract.

Card : 1/1

KRAL, Jaroslav

Spark gap for great capacity switching. Jaderna energie 9  
no.7:227-232 JI '63.

1. Fakulta technicke a jaderne fyziky, Ceske vysoke uceni  
technicke, Praha.

CZECHOSLOVAKIA

KRAL, Jaroslav, Docent, Dr of Veterinary Medicine, Central State Veterinary Institute (Ustredni statni veterinarni ustav), Prague, S. HALADEJ, director.

"The Antigenic Structure of Strains of Vibrio Fetus and Vibrio Bubulus Isolated in Czechoslovakia"

Prague, Veterinari Medicina, Vol 8(XXXVI), No 5, October 1963, pp 311-316.

Abstract [Author's English summary, modified]: A study of the antigenic structure of the somatic antigen in 17 strains of Vibrio fetus yielded two somatic strains with only one of the antigens in every strain. The strains could be classified into two distinctly different groups. The antigenic structure of Vibrio bubulus seems to be more complicated with five different somatic antigens, no one related to the O-antigens of Vibrio fetus. Sixteen references.

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- 2 -

KRAL, Jaroslav, doc. MUDr.

Antigenic structure of the *Vibrio fetus* and *Vibrio bubulus* strains isolated in Czechoslovakia. *Veter medicina* 8 no.5:311-316 O '63.

1. State Central Institute of Veterinary Medicine, Prague.  
Director of the Institute [MUDr.] S.Haladej.

KRAL, Jerzy, mgr inz.

Auxiliary functions for computing the heat and gas dynamics of turbine engines. Inst lotn prace no.20:3-9 '63.

Z/031/62/000/006/001/001  
D006/D102AUTHOR: Král, Jindřich

TITLE: Electrical-discharge machining of a Pelton wheel

PERIODICAL: Strojírenská výroba, no. 6, 1962, 285

TEXT: Application of electrical-discharge machining to finishing Pelton-wheel buckets is described. The electrical-discharge machining equipment comprises two remotely-controlled, 9-kW rotary pulse generators (400 cps, 200 A) with automatic current regulation. The prototype of the equipment was built by the CKD Blansko in cooperation with the Vývojový ústav pro mechanizaci a automatizaci (Development Institute of Mechanization and Automation) in Nové Město nad Váhom for which a patent was applied for under # PV 5725-61. The electrodes are either pressed from 6-8 mm aluminum plate or metal-mold cast. The electrode erosion equals 10-15% of the metal removed from buckets of 42 2905 steel. The ferritic-perlitic structure of the machined material is not affected by the electrical-discharge machining. The new method saves 800-1,000 manhours per wheel. Also, the

Card 1/2

Electrical-discharge machining ...

Z/031/62/000/006/001/001  
D006/D102

cost of electrodes and oil consumed during operation is less than the cost of the abrasives consumed previously. This example shows that even large machine parts can be machined by this method. There are 5 figures.

ASSOCIATION: ✓ CKD Blansko

Card 2/2



HAINDL, Karel, inz., C.Sc.; DOLEZAL, Ludvik, inz.; KRAL, Jindrich

Contribution to the hydraulics of a shaft spillway. Vodohosp cas  
10 no.3:288-314 '62.

1. Vyzkumny ustav vodohospodarsky, Praha.

HAINDL, Karel, inz., C.Sc.; DOLEZAL, Ludvik, inz.; KRAL, Jindrich

Contribution to the shaft spillway hydraulics. Part 2.  
Vodohosp cas 10 no.4:370-381 '62.

1. Vyskumny ustav vodohospodarsky, Praha.

KRAL, JIRI

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Zemepisny pruvodce Velkou Prahou a její kulturní oblasti. S 68 obrazy a 23 nacrtů. (1.vyd.) (V Praze) Melantrick (1947) 300 p. (Geographical guide-book to Greater Prague and its cultural area. 1st ed. illus., bibl.)

ICU

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4, April 1958

KRAL, Jiri (Prag)

Medical geography. Geogr.glas. no.20;117-128 '58 (Published 1959)  
(EEAI 9:5)

(Medical geography)

KRAL, Jiri  
SURNAME, Given Names

Country: Czechoslovakia

Academic Degrees: /not given/

Affiliation: /not given/

Source: Bratislava, Geograficky Casopis, Vol XIII, No 3, 1961, pp 234-236.

Data: "Medical Geography in the USSR."

GPO 981643

CZECHOSLOVAKIA/Plant Diseases - Diseases of Cultivated Plants.

0.

Abs Jour : Ref Zhur - Biol., No 8, 1958, 34981

Author : Kral Jiri

Inst : Agricultural Academy of Czechoslovakia.

Title : Sprinkling of Apple Trees as a Possible Counter-Measure  
Against Mange, Based on Observations of the Self-Insemina-  
tion Process in the Ascospore Mushroom.

Orig Pub : Spor. Ceskosl. akad. zemed. ved. Rostl. vyroba, 1956, 29,  
No 8, 779-794.

Abstract : The periods of self-insemination of the ascospore *V. inaequalis* (Cook) Aderhold. were ascertained to be as fol-  
lows: first period: April 30 to May 1st; maximum pe-  
riod: between April 30 and May 12; final period: from  
June 12 to July 12. Up to the end of May, 90 to 95% of the  
ascospores are released. Average 24 h. temperatures

Card 1/2

- 13 -

CZECHOSLOVAKIA/Plant Diseases - Diseases of Cultivated Plants.

0.

Abs Jour : Ref Zhur - Biol., No 8, 1958, 34981

indispensable to the liberation of the ascospores total 140°C. under laboratory conditions, and 108 to 150°C. in the field. Mass infection of the apple trees takes place after precipitation when reaching a temperature total of 104°C. As a rule, the sprinkling undertaken according to phenological phases does not correspond with the phases of mass infection of the apple tree. It is recommended that two sprayings with copper preparation be made prior to blooming, and that these be supplemented by two or three additional general sprayings after blooming. Variety differences of the apple trees have no bearing on the release of the ascospores. The research work on the subject has been undertaken by the Prague Institute for Plant Cultivation. -- Dzholova

Card 2/2

KRAL, Jiri

Mechanization in the production of castings by the chemical-hardening  
method. p. 288

SLEVARENSTVI. (Ministerstvo tezkého strojírenství a Československá vědecká  
technická společnost pro hutnictví a slevarenství) Praha, Czechoslovakia.  
Vol. 7, no. 7, June, 1959

Monthly list of East European Accessions (EEAI) LC Vol. 8, No. 12,  
Dec., 1959 Uncl.



KRAL, Jiri

Molding by pneumatic application of CO<sub>2</sub> processed mixture. Slevarenství  
9 no.11:416-417 N '61.

1. Zavody V. I. Lenina, výzkumny ústav slevarenských strojů, Brno.

(Molding(Founding)) (Carbon dioxide)

KRAL, Jiri; SEBOR, Pavel; STUDLIK, Stanislav; LAVICKA, Eduard

Mold and core mixtures with furan binders. Slevarenství 11 no.3:  
98-104 Mr '63.

1. Zavody pro výrobu kulickových lozisek, Zavody na valiva loziska  
a traktory, Brno; Spolek pro chemickou a hutni výrobu, provoz Chemotex,  
Boletice nad Labem.

KRAL, Jiri

Machines and equipment for higher pressure squeeze molding. Slevarenstvi  
10 no.11:419-421 N '62.

1. Zavody V.I. Lenina Plzen, vyzkum slevarenskych stroju, Brno.

KRAL, Jiri

Recent papers on medical geography. Georg cas SAV 15 no.4:  
313-135'63.

KRAL, Jiri

New dispatching equipment for underground mines. Uali 7 no.4:134-  
137 '65.

KRAL, J. A.

Chemical Abstracts  
Vol. 48 No. 5  
Mar. 10, 1954  
Biological Chemistry

concentrations of urocanic acid in human sweat. A. Zelenka and J. A. Kral (Charles Univ., Prague). *Biochim. et Biophys. Acta* 12, 479-80 (1953).—Approx. 0.1 mg./ml. of urocanic acid in human sweat was found. An as yet unidentified spot on paper chromatograms of human sweat developed with Pauly reagent was identified as imidazole-propionic acid, formed from urocanic acid by hydrogenation during electrodialytic desalting of the sweat; the spot was not detected when unsalted sweat was analyzed.

Morton Pader



KRAL, Jiri, Prof. Dr.

Athletic heart. Prakt. lek., Praha 34 no.24:545-547 20 Dec 54.

1. Kabinet televizovneho lekarstvo lekarske fakulty univ. Karlovy  
(CARDIAC ENLARGMENT  
athletic, physiol.)



# C Z E C H

✓ Amino acid losses in the sweat of persons performing hard physical work and in sportsmen. J. Kral and Antonia Zenisek (Kabinet zdravotného RKašitvi, Prague). *Časopis Lékařů Čechů* 93: 1165-63(1964); cf. C.A. 49, 11754. Three groups of persons were studied: slightly trained students (I) riding a bicycle ergometer, 22 acclimatized metallurgy workers (II), and 8 workers (III) of Pletany hot springs. Losses of water and total amino acid N were estd. in several cases (I and II) where the course was estd. at the beginning and at the end of work, a downward trend was observed. Individual amino acids were studied by paper chromatography. Decanting was not necessary when using the *tert*-BuOH-bois buffer system (Hals and Horelovsky, C.A. 48, 8302d). By means of the method of Calu and Berry (C.A. 43, 10202d), concns. of lysine, arginine + citrulline, threonine, and histidine were estd. and their over-all losses in sweat calcd. During 1-hr. work in group I, the losses of water, amino acid N, and individual amino acids were very pronounced, as compared with the 8-hr. work of group II; the averages were 105 (I) and 111 (II) for lysine, 169 (I) and 148 (II) for arginine + citrulline, and 63 (I) and 22 mg. (II) for threonine during the entire working periods. In III water losses were very low; losses of free essential amino acids were too low to be of nutritional importance. I. M. Hals

Kral, J. A.

3  
 Possible significance of urocanic acid content of sweat  
 for protection against the erythema-producing effect of  
 ultraviolet radiation. A. Zenisek, J. A. Kral, and I. M.  
 Huls (Charles Univ., Prague). *Comp. rend. biochim.*  
*Résumés communs., 3<sup>e</sup> Congr. Bruxelles 1935, 124 (in Eng-  
 lish); cf. C.A. 49, 8410A. The amt. of urocanic acid in  
 sweat greatly exceeds the amt. in other body fluids in man.  
 Since it shows powerful absorption of radiation at 300 mμ,  
 (in the zone of greatest erythema production and cancer pro-  
 duction), it may have a role as a natural protection against  
 short-wave solar rays. W. C. Tobie*

CZECHOSLOVAKIA/Human and Animal Physiology (Normal and Pathological). Skin!

T-14

Abs Jour : Ref Zhur - Biol., No 11, 1958, 51403

Author : Kral, Jiri; Zenisek, Antonin; Hais, Ivo M.

Inst : Carolina University of Prague, Institute of Medicine.

Title : The Significance of Urocanic Acid in Human Sweat for the Protection of the Skin from Ultraviolet Rays.

Orig Pub : Univ. carolina. Med., 1955, Suppl. No 1, 379-384.

Abstract : It has been established that human sweat contains urocanic acid, produced by histidine. This acid causes sweat absorption of ultraviolet (UV) rays in the part of the spectrum (290-310 m $\mu$ ) which produces erythema. The possibility of using this factor in research is discussed, in order to find a substance which would insure artificial skin protection from effects of UV rays. -- A.S. Raben.

Card 1/1

KRAL J.A

Sun-screening effect of urocanic acid. A. Zentgraf, J. A. Kral, and I. M. Hais (Charles Univ., Salyovska, Prague). *Biochim. et Biophys. Acta* 18: 180-01(1955); cf. C.A. 48: 2460c. Comparison of the ultraviolet absorption curve of urocanic acid (I) with a curve relating erythemogenic activity and wave length of the erythemogenic radiation indicates that the absorptive properties of I make it useful as a sun-screening agent. I, though absorbing erythema-producing radiation, transmits the pigment-producing radiations. The normal I concn. in the sweat of 18 subjects was in the range of 40-160  $\gamma$ /ml. Morton Pader

KRAL, J.A., MUDr, prof.; ZENISEK, A., RNDr

Paper chromatography of amino acids in blood serum, erythrocytes, sweat and urine after muscle effort; 2. communication: amino acids in patients with albuminuria after effort. Cas. lek. cesk. 94 no.5: 114-118 28 Jan 55

1. 2 kabinety televychovneho lekarstvi lekarske fakulty Karlovy university v Praze. Prednosta prof. Dr. Jiri Kral

(ALBUMINURIA

amino acids in, after muscle effort, chromatography)

(BLOOD SERUM

amino acids in albuminuria after muscle effort, chromatography)

(ERYTHROCYTES

amino acids in albuminuria after muscle effort, chromatography)

(SWEAT

amino acids in albuminuria after muscle effort, chromatography)

(URINE

albuminuria, amino acids after muscle effort, chromatography)

(CHROMATOGRAPHY

of amino acids in blood serum, erythrocytes, sweat & urine in albuminuria after muscle effort)

(MUSCLES, physiology

effort in albuminuria, amino acids in blood serum, erythrocytes, sweat & urine)

Kral, J. A.

MD <sup>1</sup>  
3-Indoleacetic acid in human urine after muscular effort.  
J. A. Kral, A. Zentgraf, and I. Stola (Charles Univ., Prague).  
*Biochim. et Biophys. Acta* 10, 100(1956).—The urinary con-  
tent of 3-indoleacetic acid, a plant growth stimulator, was  
found to increase following muscular activity. There were  
indications that such activity also resulted in decreased uri-  
nary indican.

Keal. J A

✓ Paper chromatography and polarography as a tool for the study of histidine metabolism in skin. Estimation of histidine and urocanic acid in human sweat. J. A. Keal, M. Kátová, A. Zentšek, E. Krejčí, and I. Stolz (Charles Univ., Prague). *Biochim. et Biophys. Acta* 20, 567-8 (1956) (in English); cf. *C.A.* 48, 2886c. Methods are given for the direct, simultaneous estn. of histidine and urocanic acid (I) in sweat by paper chromatography and of I polarographically. Results obtained by the 2 methods were in agreement. Morton Pader

Med. 3

EXCERPTA MEDICA Sec 19 Vol 2/6 Rehabilitation June 59

1390. Physical development and sport Telesná výchova a sport. KRÁL J. Úst.  
Telovychovného Lék. KU, Praha Cas. Lék. ces. 1958, 97/23-24 (755-757)





KRAL, J. (Praha 2, Salmovska 5.)

Physical education and athletics. Cas. lek. cesk. 97 no.23-24:755-757  
6 June 58.

1. Ustav telovychovneho lekarstvi KU v Praze, prednosta prof. dr.  
J. Kral.

(PHYSICAL EDUCATION AND TRAINING,  
in Czech. (Cz))

KREJCI, E.; KUTOVA, M.; KRAL, J.A.; ZENISEK, A.; STOLZ, I.

Polarographic determination of urocanic acid in sweat. Cas. lek. cesk.  
97 no.27-28:857-861 4 July 58.

1. II. ustav pro chemii lecarskou KU v Praze, prednosta prof. Dr.  
A. F. Richter. Ustav telovychovneho lekarstvi KU v Praze. prednosta  
prof. Dr. J. A. Kral. E. K., Praha 2, Salmovska 3.

(IMIDAZOLES, determination,  
urocanic acid in sweat, polarography (Cz))

(SWEAT,  
urocanic acid, polarography (Cz))

KRAL, Jiri; SVEJCAR, J.; JANDA, F.; MACEK, M.; MERHAUTOVA, J.; TOMANEK, J.;  
SKVARA, F.

Problem of physical education of the youth. Cesk.pediat. 15 no.1:  
60-67 Ja '60.  
(PHYSICAL EDUCATION AND TRAINING)

KRAL, J.; TAMASSY, E.; ZINTLOVA, M. NEUMANN, J.

Therapeutic exercise following cardiac surgery. Storn.lak. 62  
no.1:1-9 Ja '60.

1. Katedra telovychovneho lekarstvi fakulty vseobecneho lekarstvi  
Karlov university v Praze, prednosta prof.dr. J. Kral. IV. inter-  
ni klinika fakulty vseobecneho lekarstvi Karlov university v Pra-  
ze, prednosta prof.dr. M. Fucik.  
(HEART surg.)  
(EXERCISE THERAPY)

KRAL, Jiri

SURNAME (in caps); Given Names

Country: Czechoslovakia

Academic Degrees: Prof MUDr

Affiliation: Institute of Medical Physical Training of the Faculty of  
General Medicine of Charles University (Ustav telovychovneho  
lekarstvi fakulty vseobecneho lekarstvi KU), Prague

Source: Brno, Vnitřní Lékarství, Vol VII, No 8, August 1961, pp 942-947

Data: "The Prevention of Obesity by Exercise."

KRAL, Jiri, prof.

A history of physical exercise for women. Cesk.gyn.26[40] no.1/2:  
8-10 F'61.

1. Ustav telovychovneho lekarstvi KU Praha, prednosta prof. dr.  
J. Kral.

(PHYSICAL EDUCATION AND TRAINING)

ZENISEK, A.; ~~KRAL, J. A.~~; HAJIS, I.M.; ROTH, Z.; SKRAMOVSKY, V.; KUTOVA, M.;  
Technicka spoluprace M. Kyselova

Fractional composition of sweat produced by heat and strenuous work.  
III. Effect of previous baths. Cas.lek.cesk 100 no.6:170-175  
10 F '61.

1. Ustav telovychovneho lekarstvi KU v Praze, prednosta prof. dr.  
J. Kral. Vyzkumny ustav pro farmacii a biochemii, reditel inz. dr.  
O. Nemecek. II. ustav lekarsky chemie KU v Praze, prednosta prof.  
dr J. Sula. Vyzkumny ustav chorob revmatickych, prednosta prof.  
dr. Fr. Lenocho.

(SWEAT chem) (BATH)



BUDINSKY, J., CSc.; DOLEZAL, A., CSc.; KAZDA, S., CSc.; KRAL, J.

A possibility of influencing labor by pharmacological means. Cesk. gyn. 27[41] no.5:372-375 Je '62.

1. I a II. gyn.-por. klin. fak. vseob. lek. KU, Praha, Gyn.-por. klin. pediatr. fak. KU, Praha, Ustav pro peci o matku a dite, Praha-Podoli.

(LABOR)

(ANESTHESIA OBSTETRICAL)

KRAL, J.A.; KOPECKA, J.; ZENISEK, A.; Technicka spoluprace: BERNAUEROVA, Z.

The effect of acute effort on the quantity of sweat and on the concentration and quantity of chlorides in sweat. Cas. lek. cesk. 104 no.34:901-906 27 Ag '65.

1. Ustav telovychovneho lekarstvi fakulty vseobecneho lekarstvi Karlovy University v Praze (prednosta prof. dr. J.A. Kral, DrSc.).

CZECHOSLOVAKIA

UDC 616.24-008.47-036.16

KRAL, J.; NOVOTNY, V.; CERMAK, V.; Institute for Medical Aspects of Physical Education, Faculty of General Diseases, Charles University (Ustav Telovychovneho Lekarstvi Fakulty Vseobecneho Lekarstvi KU), Prague, Head (Prednosta) Prof Dr J. KRAL.

"Transitory Dyspnea in Healthy Subjects. The Dead Point."

Prague, Casopis Lekarů Ceských, Vol 105, No 35, 2 Sep 66, pp 962 - 968

Abstract [Authors' English summary modified]: The dead point is a temporary dyspnea occurring in long distance cyclists at a work load of 150-250 W on a bicycle ergometer after a 7 to 19 minute effort; it lasts 20 to 625 seconds. The authors report one case, where a crisis lasting 74 seconds occurred 6 minutes before the dead point. During the dead point, respiration and pulse rates, O<sub>2</sub> consumption, and CO<sub>2</sub> elimination increase and the tidal volume, respiratory quotient, and oxygen pressure decrease. The second wind is a relief for the respiratory and circulation systems; conditions return to those occurring before the dead point. 5 Figures, 2 Tables, 30 Western, 5 Czech, 2 Russian, 1 East German reference. (Manuscript received Mar 66).  
1/1

KRAL, Josef

Outlook for plywood roof structures and used elements. Drevo  
17 no.12:359-361 D '62.

1. Vyzkumny a vyvojovy ustav drevarsky, Praha.

KRAL, Iosef [Kral, Josef]

Angular limit values of Cauchy type integrals. Dokl. AN SSSR  
155 no.1:32-34, Mr '64. (MIRA 17:4)

1. Karlov universitet, Praga, Chekhoslovatskaya Sotsialisticheskaya  
Respublika. Predstavleno akademikom V.I.Smirnovym.

KRAL, J.; Neubauer, M.

Green's theorem; a report on the lecture given by Dr. Jan Marik before the meeting of the Prague Circle of Mathematicians on March 26, 1956. p. 476.  
(Casopis Pro Pestovani Matematiky. Vol.81, no.4, Nov. 1956. Para, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol.6, no.6, June 1957. Uncl.

Transformation of the Lebesgue-Stieltjes Integrals<sup>16</sup>

Král, Josef; und Marek, Jiří. Transformation des Lebesgue-Stieltjes Integrals. Czechoslovak Math. J. 8(83) (1958), 86-93. (Russian. German summary)

3

1-FW

Suppose that  $f$  is continuous and real on the closed interval  $[a, b]$ ,  $f(a) \leq f(b)$ , that  $g$  is continuous and real on  $[f(a), f(b)]$ , and that  $g \circ f$  has finite variation on  $[a, b]$ . Let  $\Phi$  be an extended-real valued function on  $[a, b]$ . Suppose the Lebesgue-Stieltjes integral  $\int_a^b \Phi(f(x)) dg \circ f(x)$  exists. Then the integral  $\int_{f(a)}^{f(b)} \Phi(y) dg(y)$  exists and is equal to the first integral. E. Hewitt (Seattle, Wash.)

Kral, J.

On the Gauss-Ostrogradski formula. p. 283.

CASOPIS PRO PESTOVANI MATEMATIKY, Praha, Czechoslovakia. Vol. 84, no. 3, Aug. 1959.

Monthly List of East European Accessions, (EEAI) LC, Vol. 8, no. 10, 1959. -Oct.  
Uncl.



KRAL, Josef(Praha)

Note on sets whose characteristic functions have signed measures  
for their derivatives. Cas pro pest mat 86 no.2:178-194 '61.  
(EEAI 10:9)

(Functions)

KRAL, Josef (Kc Karlovu 3, Praha 2)

A note on perimeter of the Cartesian product of two sets. Cas pro  
pes mat 86 no.3:261-268 '61.

1. Matematicko-fyzikalni fakulta Karlovy university, Praha.

KRAL, Josef (Ke Karlovu 3, Praha 2)

On the problem of convex body surface. Cas pro pes mat 86 no.3:277-287  
'61.

1. Matematicko-fysikalni fakulta Karlovy university, Praha.

KRAL, Josef (Praha)

"Minkowski quantities and integrals, superadditive quantity  
functionals, isoperimetric inequalities" by Alexander Dinghas.  
Reviewed by Josef Kral. Cas pro pes mat 87 no.2:237-240  
'62.